

Title (en)

Pneumatic tire with improved tie bar

Title (de)

Luftreifen mit einem verbesserten Steg

Title (fr)

Pneumatique comprenant une entretoise améliorée

Publication

EP 2070729 A1 20090617 (EN)

Application

EP 09156720 A 20051220

Priority

- EP 05112459 A 20051220
- US 2411104 A 20041228

Abstract (en)

A tire (10) having an outer surface (34) and plurality of circumferential and lateral grooves (30, 32) formed into an outer surface (34) is disclosed. The circumferential and lateral grooves extend to at least one groove depth (D) to define a groove bottom surface (36). The circumferential and lateral grooves also define a plurality of tread blocks (38) disposed around the circumference of the tire (10). The tire further includes at least one tie bar (40) extending between at least two of the tread blocks and across at least one of the circumferential and lateral grooves. The tie bar is spaced from the groove bottom surface and extends from the outer surface (34) of the tire (10) and between diagonally disposed tread blocks (38a, 38b).

IPC 8 full level

B60C 11/00 (2006.01)

CPC (source: EP US)

B29C 33/0033 (2013.01 - EP US); **B29C 33/44** (2013.01 - EP US); **B60C 11/0323** (2013.01 - EP US); **B60C 11/11** (2013.01 - EP US);
B60C 11/1369 (2013.01 - EP US); **B29D 2030/061** (2013.01 - EP US); **Y10S 425/058** (2013.01 - EP US)

Citation (search report)

- [A] US 6484772 B1 20021126 - DE LABAREYRE BERTRAND GARNIER [FR], et al
- [A] EP 1275527 A2 20030115 - CONTINENTAL AG [DE]
- [A] EP 0591125 A1 19940406 - SEMPERIT AG [AT]
- [A] JP H05169922 A 19930709 - YOKOHAMA RUBBER CO LTD
- [A] US 6454554 B1 20020924 - LOPEZ JOSE MERINO [FR], et al

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 1676693 A1 20060705; EP 1676693 B1 20090415; BR PI0505602 A 20060919; CN 100478162 C 20090415; CN 1796158 A 20060705;
DE 602005013900 D1 20090528; DE 602005023918 D1 20101111; EP 2070729 A1 20090617; EP 2070729 B1 20100929;
JP 2006188215 A 20060720; JP 4980613 B2 20120718; US 2006137794 A1 20060629; US 7276198 B2 20071002

DOCDB simple family (application)

EP 05112459 A 20051220; BR PI0505602 A 20051216; CN 200510137768 A 20051228; DE 602005013900 T 20051220;
DE 602005023918 T 20051220; EP 09156720 A 20051220; JP 2005365893 A 20051220; US 2411104 A 20041228